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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,932	12/21/2001	Makoto Terui	1272. C0498	7763

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NEW YORK, NY 10112

EXAMINER

LIANG, LEONARD S

ART UNIT	PAPER NUMBER
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2853

DATE MAILED: 07/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/023,932

Applicant(s)

TERUI, MAKOTO

Examiner

Leonard S Liang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 3-8 and 11-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,9,10,18 and 19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Election/Restrictions

1. Claims 3-8 and 11-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 8.

Drawings

2. The drawings are objected to because the specification labels references 36B and 32B as openings, but they are not pointed to openings in the figures (see figure 2). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;

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- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

The abstract is objected to because it is not descriptive; it does not specify that which is new in the art to which the invention pertains.

4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 1-2, 9-10, and 18-19 are rejected under 35 U.S.C. 102(a) as being anticipated by Suzuki et al (US Pat 6084612).

Suzuki et al discloses:

- {claim 1} A tape provided with a base (figure 1-2, reference 21); a base having electrothermal transducers formed therein, the electrothermal transducers being adapted to heat a liquid used for printing and introduced through a liquid introduction passage and to eject the liquid through an ejection port forming

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surface (figure 2, reference 20; column 7, lines 56-67); a tape member arranged at a periphery of an accommodating portion where the base is accommodated, and having connecting portions electrically connected to the electrothermal transducers in the base (figure 1-2; reference 14; column 6, lines 31-51); wherein the tape member includes reinforcement portions having a larger rigidity than that of the connecting portions and connected at one end to electrode portions on the base (figure 1, reference 16; abstract; column 2, lines 46-49; column 6, lines 31-51)

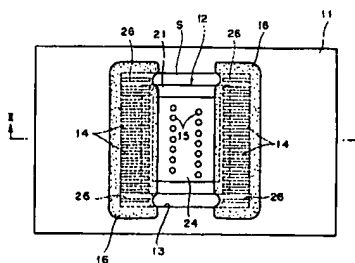


FIG. 1

- {claim 2} the reinforcement portions are arranged to face corners of the base (figure 1, reference 16)
- {claim 9} a conductive layer having connecting portions joined to the tape member, the connecting portions being connected to electrode portions on the base, the electrode portions being electrically connected to the electrothermal transducers (figure 1, reference 14; column 6, lines 31-51); a body having a liquid supply portion for introducing the liquid to the base (figure 2, reference 19); wherein the connecting portions include branch portions branched at one end and electrically connected to the electrode portions on the base and reinforcement portions having a larger rigidity than that of the branch portions and connected at

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one end to the electrode portions on the base (figure 1-2, reference 14, 16;
abstract; column 2, lines 46-49; column 6, lines 31-51)

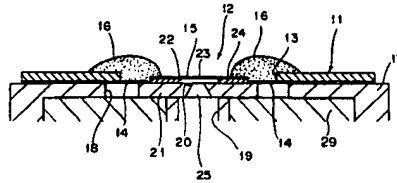


FIG. 2

- {claim 10} the reinforcement portions of the connecting portions are arranged to face corners of the base (figure 1, reference 16)
- {claim 18} the branch portions and the reinforcement portions of the connecting portions are arranged in a direction perpendicular to the direction of array of ejection ports in the ejection port forming surface (figure 1)
- {claim 19} the liquid is an ink (column 1, lines 17-39)

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Komuro (US Pat 6099109) discloses a liquid-ejecting head and method of manufacturing the same.

Shibata et al (US Pat 4725859) discloses a liquid jet recording head.

Fujikawa et al (US Pat 5580468) discloses a method of fabricating head for recording apparatus.

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Komuro (US PgPub 20010052916) discloses a substrate for use of an ink jet recording head, an ink jet head using such substrate, a method for driving such substrate, and an jet head cartridge, and a liquid discharge apparatus.

Komuro (US Pat 5696544) discloses an ink jet head substrate and ink jet head using same arranged staggeredly.

Saito (US Pat 5745136) discloses a liquid jet head and liquid jet apparatus therefor.


Koizumi et al (US Pat 5798780) discloses a recording element driving unit having extra driving element to facilitate assembly and apparatus using same.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard S Liang whose telephone number is (703) 305-4754. The examiner can normally be reached on 8:30-5 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on (703) 308-2847. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

lsl LSL
June 25, 2003


Stephen D. Meier
Primary Examiner